



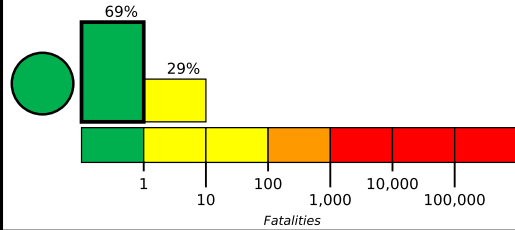
## M 5.1, 4 km SE of Sparta, North Carolina

Origin Time: 2020-08-09 12:07:37 UTC (Sun 08:07:37 local)

Location: 36.4835° N 81.1053° W Depth: 5.0 km

Created: 1 week, 4 days after earthquake

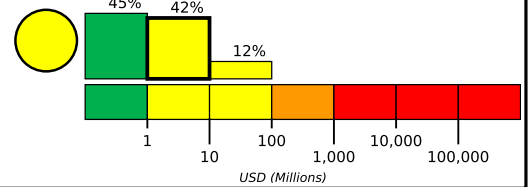
### Estimated Fatalities



Yellow alert for economic losses. Some damage is possible and the impact should be relatively localized. Estimated economic losses are less than 1% of GDP of the United States. Past events with this alert level have required a local or regional level response.

Green alert for shaking-related fatalities. There is a low likelihood of casualties.

### Estimated Economic Losses

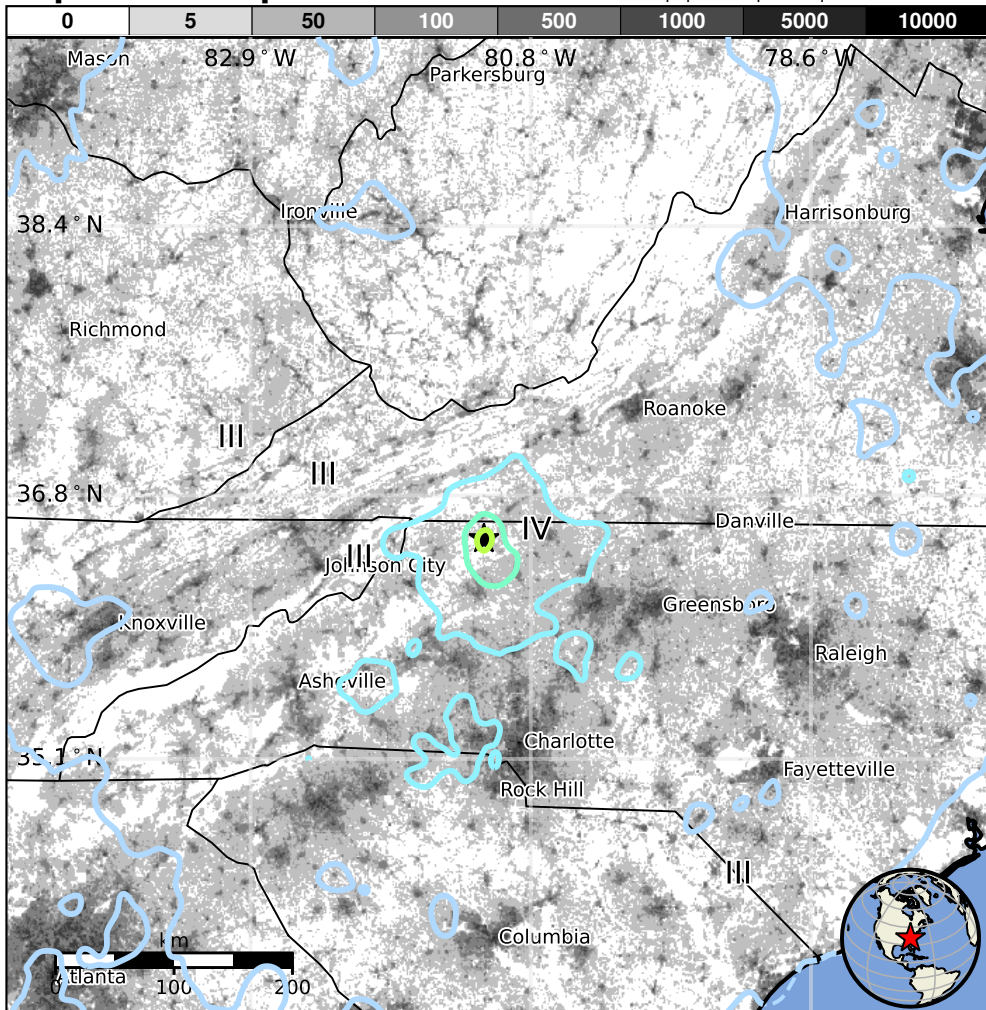


### Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		—*	36,045k	935k	25k	4k	2k	0	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

\*Estimated exposure only includes population within the map area.

### Population Exposure



### Structures

Overall, the population in this region resides in structures that are resistant to earthquake shaking, though vulnerable structures exist. The predominant vulnerable building types are unreinforced brick masonry and reinforced masonry construction.

### Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1974-08-02	316	4.9	V(12k)	—
1973-11-30	267	4.6	V(190k)	—
1980-07-27	315	5.0	VI(50k)	0

### Selected City Exposure

from GeoNames.org

MMI	City	Population
VI	Sparta	2k
V	Hays	2k
V	Thurmond	2k
V	Jonesville	2k
IV	Elkin	4k
IV	Mulberry	2k
III	Columbia	129k
III	Raleigh	404k
III	Atlanta	420k
II	Richmond	204k
II	Washington, D.C.	602k

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

<https://earthquake.usgs.gov/earthquakes/eventpage/se60324281#pager>

bold cities appear on map.

(k = x1000)

Event ID: se60324281